

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal at the intersection of MD 320 (Piney Branch Ave) and Ray Drive / Takoma Park Middle School Driveway in Montgomery County. A left turn phase shall be added for the southbound approach of MD 320 utilizing video detection. MD 320 (Piney Branch Ave) is assumed to run in a north-south direction.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA five-phase, semi-actuated mode, with the MD 320 (Piney Branch Ave) approaches continuing to run concurrently. An Exclusive/Permissive left turn phase shall be added to the southbound approach of MD 320 (Piney Branch Ave). The pedestrian phase with pushbutton actuation across the south leg of MD 320 (Piney Branch Ave) shall remain in operation. The Ray Drive / Takoma Park Middle School Driveway approaches shall also continue to run concurrent.
- Video interface equipment shall be added to an existing full-traffic-actuated, eight-phase controller housed in a NEMA size "6" base-mounted cabinet.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop. Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A.

ITEM NO.	DESCRIPTION	QUANTITY
9571	Sheet aluminum signs to consist of:  R10-12 "LEFT TURN YIELD ON GREEN (BALL)" sign, (36" x 42") mast arm mounted.	10.5 SF  1 EA

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	1 EA
8001	Pre-manufactured camera to controller (250' length) cable.	1 EA
8011	Furnish and install 12" vehicular traffic signal head section.	10 EA
8048	Remove and dispose of existing material and equipment per assignment.	1 EA
8049	Furnish and install video detector camera.	1 EA
8050	Furnish and install video detection interface equipment.	1 EA
8077	Install overhead sign.	10.5 S.F.
8087	Furnish and install electrical cable - 7 conductor (No. 14 AWG).	125 L.F.
8093	Furnish and install 2" schedule 80 rigid polyvinyl chloride - trenched	75 L.F.

C. EQUIPMENT TO BE REMOVED

All removed signal materials are to become property of the contractor.

The contact persons for District #3 (Montgomery County) are as follows:

Mr. Lee Starkloff  
Assistant District Engineer - Traffic  
Phone: (301) 513-7318

Mr. Raleigh Medley  
Assistant District Engineer - Maintenance  
Phone: (301) 513-7304

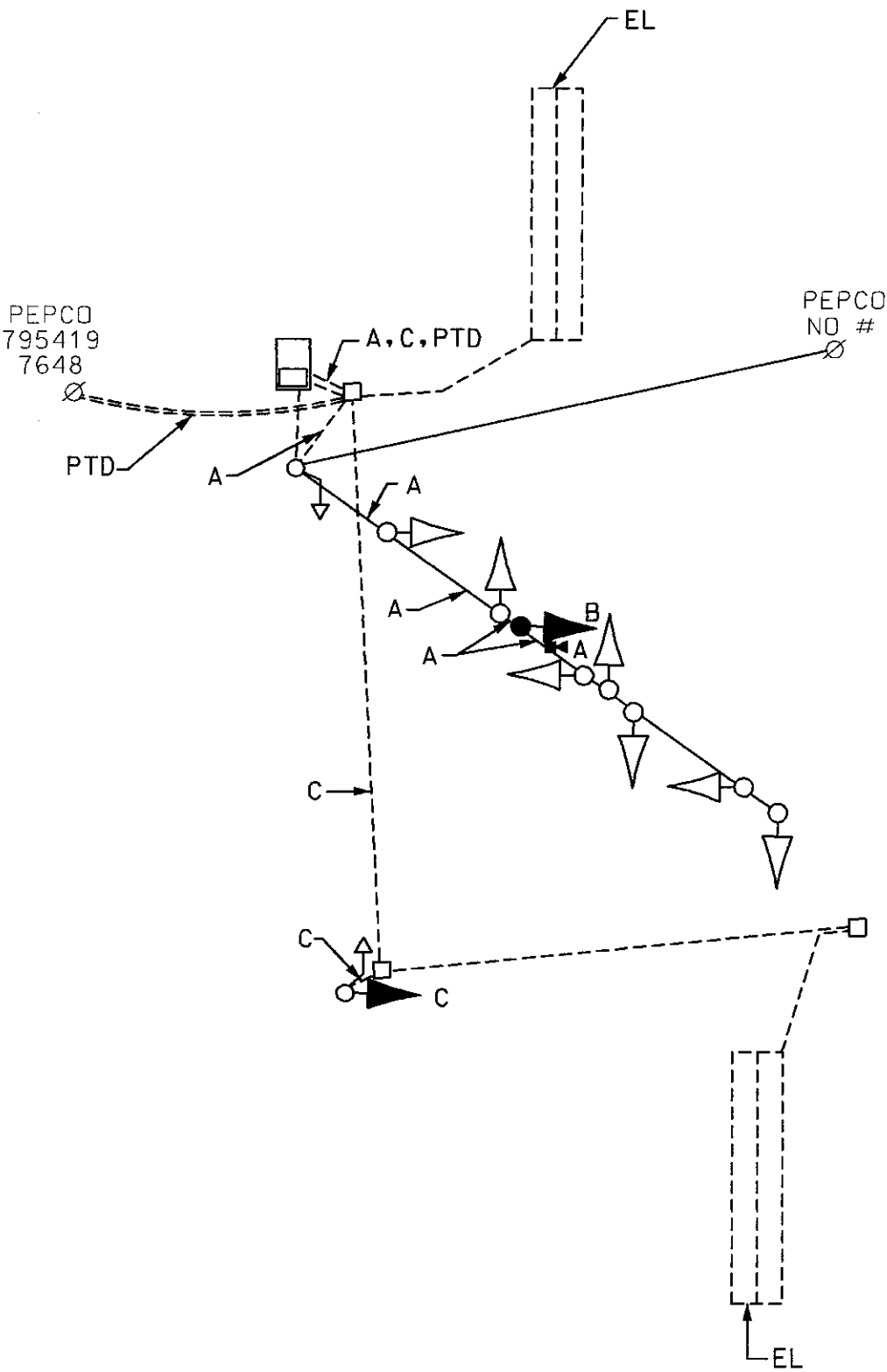
Mr. Augie Rebish  
District Utility Engineer  
Phone: (301) 513-7350

Mr. Richard L. Daff, Sr.  
Chief, Traffic Operations Division  
Phone: (410) 787-7630

PHASE CHART

	3	4	7	8	9	10	11	12	13	14	15
	(R) (Y) (C)	(R) (Y) (C)	(R) (Y) (C)	(R) (Y) (C)	(R) (Y) (C)	(R) (Y) (C)	(R) (Y) (C)	(R) (Y) (C)	(R) (Y) (C)	(R) (Y) (C)	(R) (Y) (C)
PHASE 2 & 5	R	R	←G-/G	←G-/G	G	R	R	R	R	DW	DW
2 & 5 CHANGE	R	R	←Y-/G	←Y-/G	G	R	R	R	R	DW	DW
PHASE 2 & 6	G	G	G	G	G	R	R	R	R	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	DW	DW
PHASE 4 & 8	R	R	R	R	R	G	G	G	G	DW	DW
4 & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW
PHASE 4 & 8 ALT	R	R	R	R	R	G	G	G	G	WK	WK
PED CLEARANCE	R	R	R	R	R	G	G	G	G	FL/DW	FL/DW
4 & 8 ALT CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK

WIRING DIAGRAM



WIRING KEY
A - PRE-MANUFACTURED CAMERA TO CONTROLLER (250' ) CABLE
B - USE EXISTING 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G )
C - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G )
EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING
PTD - PROPOSED TELEPHONE DROP



<b>MARYLAND DOT - STATE HIGHWAY ADMINISTRATION</b> <b>Office of Traffic &amp; Safety</b> <b>TRAFFIC ENGINEERING DESIGN DIVISION</b> <b>MD 320 (PINEY BRANCH AVE) AND</b> <b>RAY DR/TAKOMA PARK MIDDLE SCHOOL</b>			
DRAWN BY: <b>ROB CICCHINI</b>	F.A.P. NO. <b>MD69A5C/135G</b>	TS NO. <b>2374 A</b>	SHEET NO. <b>2</b> OF <b>2</b>
CHECKED BY: <b>R ZACHERL</b>	S.H.A. NO. <b>Montgomery</b>	T.I.M.S. NO. <b>F143</b>	
SCALE: <b>NONE</b>	COUNTY: <b>Montgomery</b>	LOG MILE: <b>15032000.56</b>	
DATE: <b>7-22-02</b>			